

CLAIMS

1. A battery contact to be provided from a battery holder to allow it to engage with and to conduct electricity from a terminal of a battery placed in association with the battery holder, said battery contact comprising:

an elongate wire formed to define

a) a torsional region of said wire

b) a battery terminal contact region extending from the torsional region at a first end of said torsional region, said battery terminal contact region including a battery terminal contact point, to contact directly or indirectly when in use a said terminal of a battery, and

c) a restraining leg of said wire extending from the torsional region at a second end of said torsional region,

said battery terminal contact region extending from said torsional region in a manner to be torsionally rotatable relative to said restraining leg about an axis between said first and second ends of said torsional region, and wherein the displacement of said battery terminal contact region and restraining leg are biased back to an original angular condition as a result of torsional rigidity provided by said torsional region

wherein, in use, said battery contact is supported by said holder in a manner to hold said restraining leg in a condition such that when a force is applied to said battery terminal contact region by said battery, the torsional force in said torsional region biases the battery terminal contact point towards said battery terminal.

2. A battery contact as claimed in claim 1 wherein said restraining leg is in use rigidly held by said battery holder and said battery terminal contact region is resiliently rotatable about said axis from said torsional region.

3. A battery contact as claimed in claim 1 wherein said restraining leg extends from said torsional region, at least in part in a straight form.

4. A battery contact as claimed in claim 1 wherein said restraining leg is straight.

5. A battery contact as claimed in claim 1 wherein said restraining leg is non linear.

6. A battery contact as claimed in claim 1 wherein said restraining leg includes a bend.

7. A battery contact as claimed in claim 1 wherein said restraining leg includes a battery terminal contact point.

8. A battery contact as claimed in claim 1 wherein said restraining leg includes a PCB terminal contact point.

9. A battery contact as claimed in claim 1 wherein said battery terminal contact region is non-linear.

10. A battery contact as claimed in claim 1 wherein said battery terminal contact region includes at least one bend.

11. A battery contact as claimed in claim 1 wherein said battery terminal contact region includes a straight section extending from said torsion region and a curved section intermediate of said straight section and a distal end of said wire at said battery terminal contact region.

12. A battery contact as claimed in claim 1 which, when viewed in a direction parallel to the direction in which a battery is biased towards said battery contact, is shaped.

13. A battery contact as claimed in claim 1 wherein said torsional region is straight.

14. A battery contact as claimed in claim 1 wherein said battery terminal contact region and said restraining leg of said wire extend transverse from the torsional region.

15. A holder for a battery which provides opposite polarity terminals exposed therefrom said holder comprising

a battery receiving member dimensioned to receive at least in part a battery therewith, said battery receiving member including at least one wall portion towards which a battery when in use is urged towards and wherein said one wall portion presents therefrom a battery contact, said battery contact comprising

an elongate wire formed to define

a) a torsional region of said wire

b) a battery terminal contact region extending from the torsional region at a first end of said torsional region, said battery terminal contact region including a battery terminal contact point, to contact directly or indirectly when in use, a said terminal of said battery, and

c) a restraining leg of said wire extending from the torsional region at the second end of said torsional region,

said battery terminal contact region extending from said torsional region in a manner to be torsionally rotatable relative to said restraining leg about an axis between said first and second ends of said torsional region, and wherein the displacement of said battery terminal contact region and restraining leg are biased back to an original angular condition as a result of torsional rigidity provided by said torsional region

wherein said battery contact is supported by said battery receiving member in a manner to hold said restraining leg in a condition such that when a force is applied to said battery terminal contact region by said battery, the torsional force of said

torsional region biases the battery terminal contact point towards said battery terminal.

16. A holder as claimed in claim 15 wherein said restraining leg is rotationally restrained in at least the same rotational direction as the force applied to said torsional region as a result of said battery terminal contact region, by it being located at least in part against a region of said battery receiving member.

17. A holder as claimed in claim 16 wherein said retention leg and said battery contact region of said wire extend from said torsional region to each include a distal end of said shaped wire.

18. A holder as claimed in claim 17 wherein said restraining leg is in use rigidly held by said battery holder and said battery terminal contact region is resiliently rotatable about said axis from said torsional region.

19. A holder as claimed in claim 18 wherein said restraining leg extends from said torsional region, at least in part in a straight form.

20. A holder as claimed in claim 19 wherein said restraining leg is straight.

21. A holder as claimed in claim 20 wherein said restraining leg is non linear.

22. A holder as claimed in claim 21 wherein said restraining leg includes a bend.

23. A holder as claimed in claim 22 wherein said restraining leg includes a battery terminal contact point.

24. A holder as claimed in claim 23 wherein said restraining leg includes a

PCB terminal contact point.

25. A holder as claimed in claim 24 wherein said battery terminal contact region is non-linear.

26. A holder as claimed in claim 25 wherein said battery terminal contact region includes at least one bend.

27. A holder as claimed in claim 26 wherein said battery terminal contact region includes a straight section extending from said torsion region and a curved section intermediate of said straight section and the distal end of said wire at said battery terminal contact region.

28. A holder as claimed in claim 27 which, when viewed in a direction parallel to the direction in which a battery is biased towards said battery contact, is substantially shaped.

29. A holder as claimed in claim 28 wherein said restraining leg is a torsional region rotation restraining arm which restrains the rotation of the torsional region at said second end of said torsional region as a result of force application to said torsional region by said battery terminal contact region.

30. A holder as claimed in claim 29 wherein the transition of the wire between said torsional region and the restraining leg and battery terminal contact region is defined by a bend in the wire.

31. A holder as claimed in claim 30 wherein the wall portion defines a separation between a region of said holder where a said battery is to be located and the exterior of such a region, the wall portion having at least one opening through which

5 at least those portions of said battery contact extends to be presented for contact with a terminal of said battery.

32. A holder as claimed in claim 31 wherein the torsional region and said restraining leg are translationally fixed relative to said holder and said battery terminal contact region is rotationally displaceable relative to said holder.

33. A battery contact as claimed in claim 32 wherein said torsional region is straight.

34. A battery contact as claimed in claim 33 wherein said battery terminal contact region and said restraining leg of said wire extend transverse from the torsional region.

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